E-SPI5.5K3P

EURONET SOLAR PUMP INVERTER – 5.5kW

Three-Phase 380V Solar Pump Inverter | MPPT | SVC



MOTOR POWER **5.5KW / 7.5HP**	NOMINAL CAPACITY **11 KVA**
MAX PV INPUT **900VDC**	MPPT RANGE **450–600VDC**
OUTPUT CURRENT **13A**	AC INPUT **3PH 380–440V**

OVERVIEW

The EURONET E-SPI5.5K3P is a 5.5kW three-phase solar pump inverter for medium-scale agricultural irrigation and community water supply. It drives 5.5KW / 7.5HP pump motors from a PV array of up to 900VDC or from 380V three-phase AC, with built-in MPPT at over 99% efficiency across 450–600VDC. SVC control delivers 150% starting torque at 0.5Hz for reliable deep-well start-up, and the 11 KVA nominal capacity supports 13A output current. Conformal coating, RS-485 Modbus, IEC 61800-5-1 safety and CE marking suit demanding off-grid deployments.

KEY FEATURES

99%+ MPPT Efficiency
Tracks the 450–600VDC MPP window at over 99% efficiency to maximise solar harvesting

150% Starting Torque
SVC delivers 150% torque at 0.5Hz for reliable start of medium, surface and deep-well pumps

900VDC PV Input
Accepts up to 900VDC PV input (550–750VDC VOC) for standard commercial three-phase solar arrays

Cloud Shade Adaptation
Adjusts automatically to rapid irradiance drops to prevent sudden shutdowns in passing cloud

Compact Enclosure
Space-saving 197.5×99×152mm (H×W×D) housing at just 1.5kg net weight for easy mounting

RS-485 Modbus
Built-in protocol supports remote monitoring, parameter management and SCADA integration

TECHNICAL NOTE

Model E-SPI5.5K3P. Motor 5.5KW / 7.5HP; nominal capacity 11 KVA. Input AC 3PH 380V (–15%) to 440V (+10%) / 900VDC PV; VOC 550–750VDC; MPPT 450–600VDC; start-up 300–900VDC (adjustable). Input current 13.9A, output current 13A. Control SVC / V/F, 0.5Hz/150% starting torque; overload 150%/60s, 170%/12s, 190%/1.5s. RS-485 Modbus. 197.5×99×152mm (H×W×D), 1.5kg.

© 2026 Euronet Technologies LLC. All rights reserved. | ISO 9001:2015 Certified

E-SPI5.5K3P

PRODUCT TECHNICAL SPECIFICATIONS

PARAMETER	SPECIFICATIONS
GENERAL	
Model	E-SPI5.5K3P
Motor Power	5.5KW / 7.5HP
Nominal Capacity	11 KVA
Phase	Three-phase 380V
PV INPUT	
Max PV Input	900VDC
PV VOC	550–750VDC
MPPT Range	450–600VDC
MPPT Efficiency	>99%
Start-up Voltage	300–900VDC (adjustable)
AC INPUT	
AC Input	3PH 380V (–15%) to 440V (+10%)
Input Current	13.9A
PV / Grid Switching	Automatic, with optional external kit
OUTPUT	
Output Current	13A
Output Frequency	0.1–500Hz
Overload	150%/60s; 170%/12s; 190%/1.5s

PARAMETER	SPECIFICATIONS
CONTROL & COMMUNICATION	
Control Mode	SVC / V/F
Starting Torque	0.5Hz / 150% (SVC)
Communication	RS-485 Modbus
Deep-well Rating	Up to 200 m · cloud-shade adaptation
PHYSICAL & INSTALLATION	
Dimensions (H×W×D)	197.5×99×152mm
Net Weight	1.5kg
Package	238×141×207mm
Cable RST/UVW · PE · PV	4mm² · 4mm² · 4mm²
Set Screw	M4, 1.3–1.5Nm
ENVIRONMENT	
Operating Temperature	–10°C to 50°C
Storage Temperature	–20°C to 60°C
Humidity	<95% RH
PCB Protection	Conformal coating
COMPLIANCE	
Safety	IEC 61800-5-1
EMC	IEC 61800-3 (C3)
Marking	CE

**Specifications are subject to change without prior notice.*

© 2026 Euronet Technologies LLC. All rights reserved. | ISO 9001:2015 Certified